

Turbulence Awareness for Strategic Aircraft Re-Routing (TASAR-R), Phase I

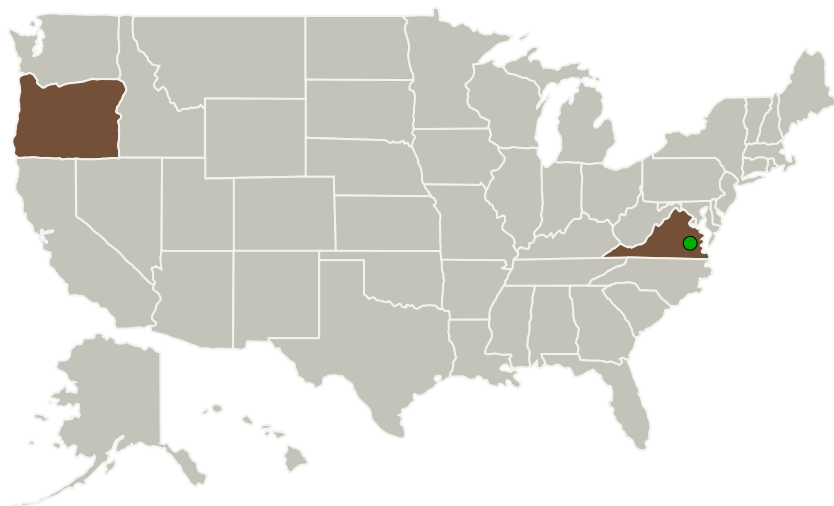
Completed Technology Project (2017 - 2017)



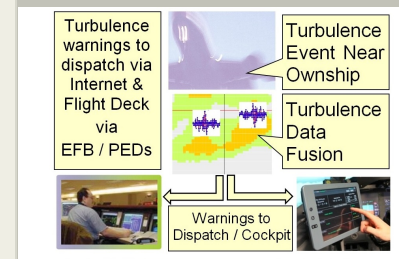
Project Introduction

The Innovation Laboratory, Inc., proposes to develop a Decision Support Tool (DST) for strategic guidance to pilots for mitigating encounters with en route turbulence hazards. Implemented on either Commercial Off-The-Shelf (COTS) Electronic Flight Bags (EFBs) or Personal Electronic Devices (PEDs), and standard turbulence data formats, the system is designed to increase the likelihood of Air Traffic Control (ATC) approval of a pilots trajectory change request by strategically presenting viable, pro-active trajectory change options to the pilot based on timely traffic and weather information. Distribution of our turbulence information to Airline Operations Centers (AOCs) allows airline dispatchers the ability to provide an additional safety net, adjusting flight plans to strategically avoid turbulence related hazards.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
The Innovation Laboratory, Inc.	Lead Organization	Industry Women-Owned Small Business (WOSB)	Portland, Oregon
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia



Turbulence Awareness for Strategic Aircraft Re-Routing (TASAR-R), Phase I Briefing Chart Image

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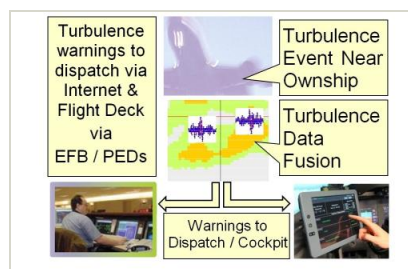


Primary U.S. Work Locations

Oregon

Virginia

Images



Briefing Chart Image

Turbulence Awareness for Strategic Aircraft Re-Routing (TASAR-R), Phase I Briefing Chart Image (<https://techport.nasa.gov/image/134369>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

The Innovation Laboratory, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

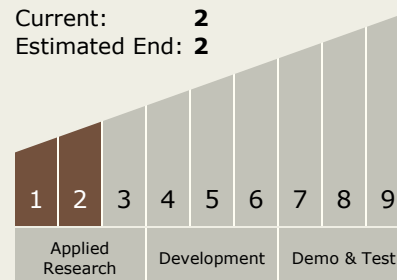
Carlos Torrez

Principal Investigator:

Jimmy Krozel

Technology Maturity (TRL)

Start: 1
Current: 2
Estimated End: 2



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Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
 - └ TX16.4 Architectures and Infrastructure